

A TOUR IN FURTHER KASHMIR

BY

B. B. OSMASTON

(*With two plates*)

A summer trip to the Highlands of Kashmir to study bird life in the less-frequented parts, more especially at high altitudes, was our object. From the following account the reader will be able to judge how far it was achieved. Our party, to start with, was three strong consisting of—

Real Admiral Hubert Lynes, R.N., Hugh Whistler (Indian Police, Retired) and the writer.

We left Marseilles on March 24th in the P. and O. *Rawalpindi* in which we were luxuriously accommodated in three separate single-berthed cabins.

Our passage through the Mediterranean was devoid of much interest, and we reached Port Said early on the 28th. As we had four or five hours here we decided to visit the Sewage Farm, a well-known bird locality about three miles out of the town. Here we found plenty of bird life, the spring migration being apparently in full swing.

The native population take a very heavy toll from these little birds, largely songsters, in passage, catching vast numbers in small spring traps which are so constructed as to kill the bird usually instantaneously by a blow near the base of the skull. We saw large bags of such birds, including many wagtails and pipits—about to be carried in to the town where they are sold in the bazaar for eating at about a penny each.

We purchased several as specimens and they were duly skinned on board ship afterwards.

The different kinds of birds seen at the Sewage Farm included:—

- White Wagtails.
- Black-headed Yellow Wagtails.
- Grey-headed Yellow Wagtails.
- Lesser Whitethroats.
- Bonelli's Willow-Warbler.
- Redstart.
- Wryneck.
- Rufous-throated Pipit.
- Tree-Pipit.
- Streaked Wren-Warblers.
- House-Sparrow.

April 1. We arrived at Aden but were not allowed ashore on account of plague. It was pleasantly cool with a N.E. wind blowing. We had to content ourselves by feeding the Gulls (chiefly Hemprich's Sooty Gulls, Herring Gulls and Black-headed Gulls) and kites, with bits of biscuit.

April 6. We arrived at Bombay about midnight and got ashore at 6 a.m. It was decidedly hot and we were glad to be off by the new extra-rapid Peshawar Express, which landed us at Rawalpindi in about thirty-nine hours. We had intended stopping a night here, but found to our surprise and disappointment that no accommodation could be had anywhere, so we quickly made arrangements for a car to take us through to Srinagar in Kashmir (200 miles) and a lorry for our kit.

We managed to get through about half way to Garhi that night and the following day, April 9, we reached Srinagar and occupied three comfortable single rooms in Nedou's new Hotel (annex). The next ten days were spent in Srinagar completing the arrangements for our trip, engaging servants and transport, hiring tents and camp furniture, and laying in provisions for four months.

During our halt in Srinagar the weather was decidedly cool—often cold—and we had some heavy rain storms. Spring was well on, and some of the summer migrants had already commenced breeding, e.g., *Saxicola torquata indica* and *Emberiza stewarti*, both building on the Takht. Other birds observed on the Takht were *Anthus trivialis harringtonii* and *A. sordidus jerdoni*, *Monticola solitaria pandoo*, *Emberiza cia strachey*; *Sylvia althaea*, *Phylloscopus iornatus humii*, *Pericrocotus brevirostris* and *Bubo bengalensis*. One of the latter was sitting in an empty nest hole on the rocky hill face and another was found killed, possibly by a Bonelli's Eagle.

April 19. Having got all our servants and kit on to two house-boats—a larger one for ourselves and a smaller for the kitchen and servants—we started off down stream in the Jhelum river, our objective being Bandipur on the north side of the Wular lake and distant some thirty miles.

The river was in full flood, so manual propulsion was scarcely necessary. We reached Sumbul bridge, a little over half way, after dark and were afraid to attempt passing under the bridge in the dark, the river being in such high flood, we might have found insufficient clearance for our boats, so we tied up for the night. The weather was most depressing, cold, windy and wet.

Our spirits revived with the morning light and we ran under the bridge in safety—only a few inches to spare! and reached the Wular Lake about midday.

Owing to the unusually high floods the lake had become a very extensive sheet of water probably not less than 100 square miles whereas it is usually very much smaller, especially in the late autumn.

As we entered the lake, which had flooded out extensive areas of cultivation, we saw numbers of rats, apparently the ordinary large brown field variety, swimming for their lives. Many were drowning and still more had already succumbed—a few were striking out bravely for the land, miles away, which they could never reach. A few more fortunate ones had found a stick or a weed tuft to rest on. We also saw near by several apparently, well-fed specimens of Pallas's Fishing-Eagle which were evidently already gorged to repletion with these rats. We also saw a pair of Ospreys over the lake but they were not interested in the rats.

Numbers of Garganey Teal on migration, a party of Godwits and a Glossy Ibis were other interesting birds seen on the lake.

After three hours paddling we reached Bandipur, on the north side of the lake, where our kit was put on shore and loaded up on to some thirty ponies. Three miles up the road brought us to the Sunarwani Rest House by the Gilgit Road, a fairly good centre for birds, with a river close at hand.

Passing through the large village of Bandipur, we noticed a large heronry on the tops of two or three large *Chenar* trees. Some of the birds appeared to be incubating and others building. The nests were inaccessible without a climbing outfit. The birds were the common Grey Heron.

April 21. Explored the Madmati river for a few miles. Saw Brown Dippers with young strong on wing and Plumbeous Redstarts with eggs. White-capped Redstarts and Grey Wagtails were not yet breeding.

April 22. Went out in a boat on the Wular lake. Saw large flocks of gulls which were rather wary. We however ultimately succeeded in securing three nice specimens which proved to be Brown-headed Gulls (*Larus brunneicephalus*). These birds winter along the Indian coast and breed at high altitudes in Tibet by the Salt lakes, e.g., Tso Kar and Tso Moriri lakes in Rupshu at 15,000'. Those we saw were evidently on their way to their breeding grounds.

April 23. Bandipur to Olus, seven miles along the northern shore of the Wular lake. On the march we saw Paradise Fly-catchers and Wrynecks, doubtless recently arrived, Goldfinches, King Crows (*D. longicatudatus*), Stewart's Bunting and many Rufous-backed Shrikes.

The camp was a pretty one among willow and mulberry trees and near the village. We noticed a fine large Tawny Owl (*Strix aluco biddulphi*) sitting all day in a willow near our tents. His mate was probably sitting on eggs in a neighbouring hollow tree but we failed to find her.

We secured several specimens of the Gold-fronted Finch (*Metoponia pusilla*) which were in fair sized flocks on the dry hillside, studded with low thorny scrub and weed growth.

April 24. A march of eight miles, first up valley to a pass at 8,000' and then down again to about 6,000' in the well-known Lolab Valley. Snow was still lying in patches near the pass. Here among the silver firs, spruce and blue pine we noticed parties of Warblers (*Phylloscopus*) and Black-crested Tits (two species) also Nuthatches (*Sitta leucopsis*) and *S. kashmiriensis*, and several large green woodpeckers—doubtless *Picus squamatus*, though we failed to secure one. Himalayan Pied Woodpeckers (*Dendrocopus himalayensis*) were also in evidence—and we heard several Collared Pigmy Owlets (*Glaucidium brodiei*) calling.

While resting in the open near the pass we observed a pair of Golden Eagle soaring at a great height overhead. The shape of this splendid eagle is unmistakable on the wing. We also saw a Buzzard at close quarters.

As we descended into the Lolab valley we passed through a forest

of deodars, a tree which is absent from a large portion of Kashmir but is common in the Lolab and adjacent Kishanganga valley, and also in Bhadarwah.

April 25 to 28. We spent four days in the Lolab valley exploring the country round Makám (our camp).

We saw the usual birds of the Kashmir valley including our first Cuckoo and Indian Oriole.

Tickell's Ouzel were singing both morning and evening.

One of the commonest birds in the Lolab is the Slaty-headed Paroquet (*Psittacula schisticeps*). We found them mostly in small flocks feeding on the flowers (petals) of the apple trees and on the catkins of the walnut trees. This bird is not at all common in the valley of Kashmir. We also shot a Long-eared Owl (*Asio otus*), being mobbed by a pair of Jays (*G. lanceolatus*). This Jay I had not previously seen in Kashmir. It is one of the truly Himalayan birds which is largely confined to the southern face of the Pir Panjal and the Chenab Valley. Lastly we heard on several occasions the monotonous and characteristic call of a Scops Owl. We failed to obtain or even to see this owl, but the call is identical with that of *Scops sunia*, a bird I know well in the sal forest of the Sub-Himalayan tract.

On April 27, Admiral Lynes received bad news from home and decided he must give up the expedition and return at once to England. This was a great blow and disappointment to all of us. The Admiral would not hear of our returning home with him, and insisted on our carrying out the programme as arranged, and the following day we sadly bid him farewell as he left in a car for Srinagar.

April 29. A Besra Sparrow-Hawk (*Accipiter virgatus affinis*) was secured which proved to be laying eggs, but we failed to find the nest.

April 30. Return march to Olus. On the way we found the nest of *Sitta kashmiriensis* in a hole in a deodar tree which had been closed up with clay masonry leaving a hole of 1" in diameter only. The nest was lined with thin bits of yew bark and was empty.

Near by we noticed a pair of Buzzards (*B. desertorum*) on the top of a big deodar tree, and a search revealed their nest near the top of another deodar. As it was a difficult tree to climb and the nest might not have been new, we left it unexamined.

May 1. Olus to Sunarwáni.

On the march we saw Bee Eaters (*M. apiaster*). These birds have apparently just arrived. We also fired at and wounded, a chiffchaff which flew away heavily and was quickly seized by a shrike (*L. erythronotus*) which we shot with the bird in its beak and eventually obtained both. The chiffchaff was *P. collybita sirdianus*. The next two days we halted and reduced our stores, etc., which had been arranged for a party of three.

We saw and obtained a fair number of birds here including *Aleonax ruficaudus*, *Cyornis tricolor*, *Horornis pallidus*, *Acanthopneuste occipitalis* and *Sylvia althæa*.

Wrynecks, Hoopes and Tickell's Ouzels were common. We also

saw numbers of swifts of two kinds, viz., a large Spine-tail Swift and also *Cypselus apus*—flying high and probably moving up to their breeding grounds. We failed to secure specimens.

We also noticed a small party of four black storks resting on a hill top and evidently also on migration.

May 5. We marched nine miles south along the eastern margin of the Wular lake, as far as Ajas, a pretty camp close to the lake, under mulberry trees. There were many Whiskered Terns and Pheasant-tailed Jacanas over and on the lake and we secured specimens. We also saw *Dicrurus longicaudatus* and W. secured a *Motacilla citreola* which is a passage migrant in Kashmir. Rock Horned Owls (*Bubo bengalensis*) and Scavenger Vultures (*Neophron percnopterus*) were both breeding on the steep rocky precipices north of our camp.

May 6. Ajas to Manasbal. Seven miles. Saw three male Paradise Flycatchers near our camp, of which two were white and one rufous. Reed Warblers (*Acrocephalus stentoreus brunescens*) were already very noisy in the reed beds in the lake.

May 7. Our camp at Manasbal was under gigantic Chenar trees (*Platanus orientalis*) full of Jackdaws mostly with nests and eggs in their hollows.

The view over the Manasbal lake was very fine. We climbed to the top of a neighbouring isolated mountain, Ahateng 6,200' where we found Skylarks, Jerdon's Pipit, Stonechats, Stewart's Buntings and the Chukor—all breeding and with eggs, except the Skylarks.

In the village below we found several swallows' nests with eggs. The nests were all in the dwelling rooms of villagers, who do not disturb the birds. The nests and eggs resemble those in Europe. The Kashmir swallow is *Hirundo rustica rustica*.

May 8. Manasbal to Ganderbal. The shortest road across country is only six miles. We made a detour in order to explore the Krahöm swamp, an extensive bog near which, in previous years, I had found Harrington's Paddy-field Warbler in large numbers. We were, however, apparently rather too early for this bird as we only saw two and secured one.

Our camp at Ganderbal was alongside the Sind river full of icy water straight down from the glaciers. In the eve: we went up stream and saw a good many *Did-he-do-it* Plovers and also little Ringed Plovers both breeding on the islands.

One solitary stranger was also seen—a Plover, which I had never seen before. It was as large as a *Did-he-do-it*, but quite differently marked. It was being attacked by a pair of little Ringed Plovers which had freshly hatched young. It was seen again by both of us in the evening and although we failed to secure it, we satisfied ourselves that it was undoubtedly a Grey-headed Lapwing (*Microsarcops cinereus*). This would be an addition to the list of Kashmir birds.

On the islands in the Sind river we found three nests of the Common Sandpiper containing four nearly fresh eggs in each. The eggs were laid in depressions in the sandy ground under low spreading clematis. A *Did-he-do-it's* nest on the same island also contained four eggs.

May 11. Took a tonga to Tula Mull village and thence made a very thorough re-examination of the Krahom jhil.

In the drier area we shot two Grasshopper Warblers (*Locustella naevia straminea*) and one Blyth's Reed-Warbler (*Acrocephalus dumetorum*), and one *Cypselus apus*. Later on assisted by a line of coolies we explored a quaking bog, where it was necessary to walk very circumspectly. Here we put up a number of rails and shot:—

Eastern Ruddy Crake (<i>Amaurornis fuscus bakeri</i>)	...	4
Eastern Baillon's Crake (<i>Porzana pusilla pusilla</i>)	...	2
Spotted Crake (<i>Porzana maruetta</i>)	1

We saw no water rails, a bird which we had hoped to find in the swamp.

May 12. Before leaving Ganderbal we had a day on the mountain side, which rises up rather abruptly from the valley level (5,000') up to about 11,000'. On the lower slopes we found Stewart's Bunting, Jerdon's Pipit, the Eastern Stonechat and Hume's Lesser Whitethroat all breeding and with eggs. We also saw and secured specimens of the Grey-headed Bunting (*E. fucata*), which were also about to breed.

May 13. Marched about ten miles up the Sind valley to Kangan. The weather was perfect. We secured a nest with four fresh eggs of the Jungle Crow (*Corvus coronoides intermedius*) near the top of a blue pine. These birds are common up to the limits of tree growth. Near our camp we noticed a pair of King Crows (*Dicrurus leucophaeus longicaudatus*) which gave a very perfect imitation of the call of the Kestrel. They evidently were also about to breed as they vigorously attacked any crow which approached the large walnut tree in which they had taken up their quarters.

May 14. Kangan to Gund. Fifteen miles. A delightfully cold morning: our path followed the river. On the march we saw several European Rollers and secured a pair. These birds are of course migrating, spending the summer months and breeding in Kashmir. We also shot a pair of Yellow-vented Bulbuls (*Molpastes leucogenys*) which are common throughout the Kashmir main and side valleys up to about 6,000'. We also shot a young Brown Dipper (*Cinclus pallasi*) in spotted plumage. These birds are evidently very early breeders.

May 15. Gund to Gaggan Gir. Seven miles. Our path still follows the valley, and we are now at 7,000' altitude among the Firs and Pines. The scenery is much grander and the river is beginning to assume the characters of a torrent. The Indian Blue Chat (*Larvivora brunnea*) was common in the mixed deciduous forest on the hillside above Gund. The cock has a loud, clear but short song. The birds are extremely shy and we secured three specimens only and that with some difficulty.

We also shot three specimens of the Himalayan Pied Woodpecker (*Doyobates himalayensis*)—also examples of the Pale Bush-Warbler (*Horornis pallidus*) and of Tytler's Willow-Warbler (*Phylloscopus tytleri*). A pair of Fire-caps (*Cephalopyrus flammeiceps*) were also seen, doubtless about to breed—and two specimens of *Cuculus saturatus* were both seen and heard calling—the Himalayan Cuckoo is not very common in Kashmir.

May 16. Gaggan Gir to Sonamarg. Seven miles. The ascent has become a good deal steeper, the river being a veritable torrent and even a cascade in places and the valley a rocky defile passing between very steep rocky precipices thousands of feet above.

Avalanches had done much damage sweeping away bits of fir forest and piling up the debris of smashed timber in huge masses alongside the river. In three separate places the river was bridged by substantial snow bridges a most unusual state of affairs below Sonamarg so late in the season.

When we arrived at the Tajwaz camping ground, altitude 9,000', near Sonamarg we experienced considerable difficulty in finding a spot clear of snow and fit to camp on. Here we halted five days during which time the snow rapidly disappeared in the hot sun and the ground all around our tents became a veritable cloth of gold from the flowers of a pretty little yellow crocus-like flower. This is probably the origin of the name 'Sonamarg' (Golden meadow).

The view from our tents looking straight on to a row of peaks 16,000' high with a glacier in the foreground only two miles distant, was very grand.

We found birds fairly numerous in spite of the snowy conditions.

The Larger-spotted Nutcracker (*Nucifraga multipunctata*) was fairly common and we came across a family of fully-fledged young, probably at least two months old.

Other birds seen in and around Sonamarg were Nuthatches (*S. leucopsis kashmiriensis*), Crested Black Tits (*Lophophanes melanolophus* and *rufonuchalis*), Tree-Creepers (*Certhia himalayana* and *familiaris hodgsoni*), the Black and Yellow Grossbeak, Mistle-Thrush, Red-flanked Bush-Robin, Red-browed Finch, Orange Bull-finch, Stolicka's Mountain-Finch, Skylarks, the Eastern Meadow-Bunting, the Rufous-tailed Flycatcher, Pipits (*A. roseatus* and *trivialis harringtonii*), also Alpine Choughs, Jungle-Crows, and Scully's Wood-Owl.

A few of these were already commencing to breed and before we left we secured eggs of *Ianthia rufilata*, *Lophophanes rufonuchalis*, *Lophophanes melanolophus* and *Certhia familiaris hodgsoni*.

May 22. Sonamarg to Baltal. Ten miles. The path still follows the river which is now again slow flowing, and the rise to Baltal is only a few hundred feet. Red-billed Choughs were seen on the march, and we secured also a nest of the Jungle-Crow with four hard set eggs.

We found the out-buildings of the Baltal rest-house had been completely wrecked by an avalanche and the bridge over the stream giving access to the camping ground had also been carried away.

The valley above Baltal was very full of snow and from about two miles up the river disappeared altogether under beds of snow and snowfield. W. found the nest of Scully's Wood-Owl (*Syrnium biddulphi*) in a large hole in a birch tree only six feet from the ground containing two slightly-set eggs and portions of the shell of a third egg lay on the ground outside the hole.

A White-beasted Dipper (*Cinclus kashmiriensis*) was shot by the stream below our camp.

May 23. Baltal to Matayan. Fifteen miles. As we were to cross

the Zoji La Pass to-day we had to make an early start to avoid risk of avalanches. We got off with our retainers and our kit loaded on twenty-five ponies at 5.30 a.m. Owing to the heavy winter snowfall the pass was not yet open for pony traffic and instead of going up by the road we had to follow the much steeper and shorter route up the snow-filled gully. An icy wind blew down the valley. We reached the pass after a climb of about 2,000 feet, at 8 a.m. and were glad of the sun. In ordinary years the route from this point down to Matayan is easy, being a gentle decline over snow. On this occasion, however, things were quite different, and our troubles began after leaving the Pass. Owing to the exceptionally heavy winter snowfall our track lay over a series of avalanches which made the going slow and difficult for men and almost impossible for laden ponies, which frequently sank up to their girths in snow and had to be unloaded and lifted out. Moreover the track lay often along steep snow slopes overhanging a rushing icy torrent and we were extremely fortunate in not losing any of our animals or kit. We reached the hut at Matayan at 3.30, cold and tired, and were glad of the welcome shelter.

We had seen very few birds *en route*. Chiffchaffs, Bluethroats and Sandpipers were on their breeding grounds which were mostly under snow. Some deluded bird, possibly a bunting, had started building a nest in a hole in a snow cornice! We shot a cock Ruby-throat, two Horned Larks, a Skylark, two Tree-Pipits and two Hodgson's Pipits. We were surprised to find the Tree-Pipits on the bare open hillsides, there being no tree growth after leaving the Zoji La above Pandras.

May 24. Matyan to Dras. Fourteen miles. A dull, cold morning—a pair of Tibetan Ravens greeted us outside the hut. The march was over snow as far as Pandras.

At Pandras we came on a small plantation of poplars and willows—the first trees we had seen since the Zoji La. Here we found our first Magpie's nest—which contained a single fresh egg.

The Ladakh Magpie (*Pica pica bactriana*) is very similar to the English Magpie in note and appearance, but is not found in forest localities. It frequents the stony sandy wastes of Ladakh and Baltistan, keeping in the vicinity of villages where it finds food and also willow trees in which it builds its nests. A pair of these magpies have for years built their nest in a hole under the roof and above the front door of the Dak Bungalow at Dras! An unusual site for this species.

Below Pandras we saw many Short-toed Larks (*Calandrella acutirostris*) and a single *Ibidorhynchus*.

At Dras there was practically no snow. The altitude of the village is 10,000', and there is a Post and Telegraph office as well as a Meteorological station. The minimum temperatures recorded at this station in winter are lower than any others in the Indian region, and not infrequently temperatures of 30° below zero Fahrenheit are experienced early in January.

We halted five days at Dras which gave promise of good things in the bird line, but as a matter of fact we found we were really about a month too early for most breeding birds.

By far the commonest birds around Dras at this time of the year are Horned Larks. There are also a considerable number of Short-toed Larks. The former are in flocks feeding in the corn fields on the young germinating grain. A little later as the snow melts from 11,000' to 13,000' they will retire to these higher altitudes to breed. All the Horned Larks we saw were *Otocorys alpestris longirostris*. Magpies were fairly common and we found several nests in willow trees at a height of from 10' to 20' with five or six eggs generally fresh. The Eastern Carrion Crow (*Corvus corone orientalis*) was also not rare, being found in the vicinity of villages. A pair had a nest with three eggs in a poplar tree in our camping ground at Dras. The birds were most confiding and did not display any of the cunning or devilry so usual to members of the Crow tribe.

Both species of Dipper were found here, the Brown and the White-breasted but whereas the former had bred some months ago the latter had not apparently commenced building.

Other birds seen in the vicinity were Swifts (*Cypselus apus pekinensis*), Martins (*Delichon urbica*) and Crag-Martins (*Ptyonoprogne rupestris*). Redstarts were also common, and mostly building but we obtained one nest in a hole in a wall containing four fresh eggs. Kestrels were quite common and a few Ravens and Choughs were seen, the latter chiefly at higher elevations. A pair of Ravens frequented the camping ground, close to our tents. They were not very shy and they watched our bird-skinning operations and carried off the bodies of the birds we had skinned and thrown away. A Lämmergeyer also found our camp interesting and after soaring around for a little, alighted a short distance away. The House Sparrow (*Passer domesticus parkini*) is exceedingly common but they had not yet commenced to lay.

May 30. Dras to Tashgam. Fifteen miles. Our path lay down the Treaty road which follows the Dras river. Soon after leaving Dras we saw a kestrel swoop down into a party of larks one of which it secured and carried off in its claws. The lark was, I think, a *Calandrella*. The Kestrel in Ladakh and Baltistan seems to be much more addicted to attacking birds than the European bird, as we saw it seize and carry off birds on two other occasions the victim being in one case a Bluethroat and on the other apparently Stoliczka's Mountain Finch.

The march down the valley was very hot indeed about midday and we were glad to reach the welcome shade of our camping ground which was in an irrigated walled in plantation of willows and poplars. A pair of Carrion Crows had a nest with young in a tree close to our tents but the parent birds were curiously shy about returning to the nest. A pair of Hobbys (*Falco subbuteo*) also frequented the willow plantation in which they evidently intended to breed later.

A Golden Eagle was seen to-day soaring at a considerable height. Also a number of vultures and a raven collected round the carcass of a horse. The vultures varied considerably in colour some being brownish, others nearly white—different stages no doubt of *Gyps himalayanus*.

May 31. Tashgam to Karkitchu. Fourteen miles. Still following

the Dras river down to our camp at 9,000, on the way we passed a large patch of cultivation with patches of scrub, briars, etc., and here we found numbers of Bluethroats, some in full song. We noticed cocks with a red spot, a white spot and unspotted blue, probably all one species, showing how variable is the throat colouration in this species. *Phylloscopus indicus* was not uncommon on the dry rocky slopes with small bushes near our camp. We also saw the Sind Willow-Warbler (*Phylloscopus collybitus sindianus*) and the Eastern Meadow Bunting (*Emberiza cia stracheyi*) building. Currant bushes of three kinds as well as juniper bushes were very common on the hillsides round our camp.

June 1. Karkitchu to Kargil. Seven miles. A short march down to the junction of the Dras and Suru rivers and then up the latter two miles to the large village of Kargil. This is rather an important place being near the junction of two trade routes, viz. that from Yarkhand *via* Leh and another from Skardu.

There is much valuable cultivation and an excellent system of irrigation channels, with plenty of tree growth (all planted and dependent on irrigation). There is a Post and Telegraph office, a dispensary and many small native shops. Here we halted four days.

On the march from Karkitchu we saw for the first time several Chats (*Enanthe pleschanka*).

The valley around Kargil is very beautiful at this time of the year with its poplars, willows and apricot trees in delicate new green leaf and the crops, chiefly barley, about a span high. Between the fields are masses of beautiful blue irises. The altitude of Kargil is about 8,900' and was the lowest place visited by us beyond the Zoji La. The maximum and minimum temperatures at this time of the year were 80° and 50° respectively.

The common birds of Kargil met with by us were:—

Carrion-Crows, Magpies, Kestrels, Skylarks, Short-toed Larks, Bluethroats, Redstarts, Hume's Lesser Whitethroat, Chiffchaffs, Common Rose-Finches, Gold-fronted Finches, the Large-billed Bush-Warbler and a few Hoopoes and Orioles.

The Kestrel, of which we found two nests with three and four fresh eggs respectively proved to be *Falco tinnunculus tinnunculus*. The nests were in holes in sandstone cliffs, one overhanging the river.

The larks were not yet breeding but we found two Bluethroats' nests in grass at the base of small thorn bushes with four and five nearly fresh eggs.

Whitethroats were mostly building but one nest with four fresh eggs was found in a briar. Nest and eggs much resemble those of the European Lesser Whitethroat. Several Chiffchaff nests were found chiefly in low thorny bushes, containing generally four eggs which are white-spotted and speckled with chestnut and *not chocolate* markings as in the English bird. The Ladakh Chiffchaff proves to be *Phylloscopus collybita sindianus*. We obtained the nest of a Hoopoe (*Upupa epops epops*) in a hole in a willow tree in the village containing eight fresh eggs. Most of our time in Kargil was however spent in watching a Wheatear (*Enanthe pleschanka*) which was not uncommon on the neighbouring sandy, rocky plateaux

above the river. Each pair occupies an area of about half a square mile of the driest and most desolate country imaginable. The cock is a dapper little fellow in his pure black and white plumage. The hen is pale sandy brown and very inconspicuous in the sandy wastes she frequents. The cock has a bright clear song sometimes uttered from the top of a rock, and at others on the wing while flying round in circles at a considerable height. After singing on the wing the bird will sometimes execute a remarkable dive to earth carried out at lightning speed. It was some time before we discovered the nest of this chat, as the birds are wary and do not readily give away the position of the nest. Eventually however we found a good many nests under construction, which about ten days later contained four or five eggs each. Nests were situated in holes under rocks or stones, usually invisible from outside, and were composed of dry grass or weed stems, with a dense, warm lining of wool and hair. The eggs pale blue, spotted pinkish.

June 6. Kargil to Paskyum. Six miles. Our route led over a sandy plateau frequented only by Siberian Chats and a few Short-toed Larks. Our camp at about 9,300' was alongside the Wakka stream, a tributary of the Suru river.

There was plenty of dense willow and thorn growth near our camp which was full of Bluethroats and Chiffchaffs. We watched a pair of Chiffchaffs building their nest near the top of a pollard willow, fifteen feet from the ground. This is a most unusual situation for the nest. We saw the Grey-backed Shrike (*Lanius tephronotus*) for the first time here. Also a Lämmergeyer was noted.

On the hill above our camp we shot a Desert Chat (*Enanthe deserti oreophila*) a bird chiefly found at much greater altitudes. We also found a Skylark's (*Alauda gulgula guttata*) nest with four fresh eggs in a lucerne field and a desiccated adult Horned-Lark which appeared to be *O. elwesii*, as well a nest of *Enanthe pleschanka* in a pile of stones which contained five fresh eggs.

The Olivaceous Tree Warbler (*Phylloscopus indicus*) was along the Wakka stream. Nests of the Bluethroat, Grey-backed Shrike (two eggs) and Chiffchaff were found on the march.

The Olivaceous Tree Warbler (*Phylloscopus indicus*) was observed in a side valley 1,500' above our camp.

June 9. Lotsam to Maulbekh. Nine miles. Following the Wakka stream up a rather narrow valley we reached an open cultivated area at 10,750' at Maulbekh. This is our first experience of Buddhist country with its chortens and mane walls.

We found the vicinity of the stream near Maulbekh an excellent place for several birds, chiefly Bluethroats, Pied Wagtails, Chiffchaffs, Skylarks and Common Sandpipers all of which were breeding. The Pied Wagtails (*Motacilla alba hodgsoni*) built well-concealed nests under stones on stony islands in mid stream. Sandpipers had eggs on the same islands which were mostly near hatching.

A pretty little yellow flowering plant, a *Corydalis* was found growing out of the interstices of dry rocks. This has proved to be a new species, *C. osmastonii*.

June 11. Maulbekh to Bod Kharbu. Sixteen miles. Making an early start we passed literally hundreds of Blue Rock Pigeons



1.—Snow bridge on the Sind River.



2.—Track of an avalanche, Sind Valley.



3.—Glacier opposite our camp at Sonamerg.



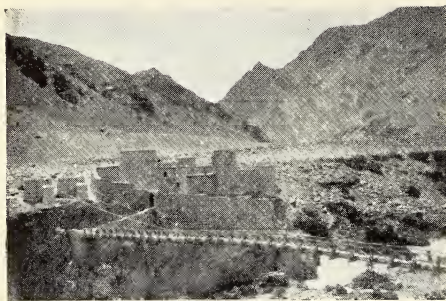
4.—Zogi La pass.



5.—Baggage pony sunk in snow beyond Zogi La.



6.—Buddhist monasteries at Lamaguru.



7.—Fort and bridge over Indus at Khalatze. 10,000 ft.



8.—Rungdum swamp at head of Suru Valley. 13,000 ft.



9.—Crossing Dras River.



10.—Junction at Shingo and Shigar Rivers.



11.—Road to Skardu over Deosai Pass. 13,000 ft.



12.—Lake at 14,000 ft., Sirsangri La between the Deosai and Kashmir.

feeding in the cultivated fields. These were *C. intermedia neglecta* and *C. rupestris*. They spend the middle of the day sitting on the cliffs above Maulbekh. We also saw a party of no less than eleven Magpies apparently engaged in a 'Panchayat'. We crossed the Namika La Pass (13,000') about half way and then commenced the gradual descent. On the way we came across two Desert Chats and also the first Adam's Finches (*Montifringilla adamsi*) we had seen. These latter are conspicuous from the large amount of white in their plumage which they display especially on the wing. They are very tame and confiding and they show no hesitation in visiting their nests in the presence of a spectator.

June 12. We halted one day at Bodkharbu which is 11,550' above sea level. Here we found Adam's Finch building among stones. Also two nests of the Robin Accentor (*Prunella rubeculoides*) built almost on the ground in low dense Caragana bushes (resembling gorse). We also found several Bluethroats' nests with eggs in the thorny scrub by the river. This thorny scrub (*Hippophae rhamnoides*) is always a safe find for Bluethroats and Chiffchaffs. A snow cock was heard calling on the rocks far above our camp.

June 13. Bodkharbu to Lamaguru. Fifteen miles. Our march to-day led over the Fotu La Pass, 13,500'. We sat and ate our lunch close to a little bit of swampy ground near the Pass and watched a pair of red-billed choughs feeding close by. Afterwards, on the descent, we heard a new bird call which reminded me of the Great Rose Finch (*Carpodacus rubicilloides*) which I had previously found common and breeding near the Pangong Lake. We stalked these birds and W. shot two out of three at one shot—one a beautiful male in pink and grey plumage, the other a young male in brown striped plumage. Both were breeding birds. They proved to be Severtzoff's Rosefinch (*Carpodacus severtzovi*).

Lamaguru where we arrived in the afternoon, is at an altitude of 11,500'. It is extremely picturesque with its monastery perched on sandstone cliffs and with numerous chortens and mane walls lining the approaches to the village. The surrounding hills, especially on the south and east, are composed of a soft cream-coloured silty material fully a thousand feet in thickness—whether this was laid down under water or by air is not known.

June 14. Lamaguru to Khalatze. Ten miles. The march led first down a rather narrow ravine and later on down a valley with a big stream, to its junction with the Indus river two miles below Khalatze. The Indus here is about 10,000' above the sea. The valley is hot and dry. We crossed the Indus by a fine suspension bridge constructed on the site of an old stone bridge built by King Naglug in A.D. 1150. The rocky gorge down which our path lay to the Indus was remarkable for the metamorphic rocks of various striking colours red and green predominating. Wild roses with deep crimson blossoms were flowering in profusion near the stream and one bush about seven feet high bore I estimated no less than 700 flowers. Another conspicuous plant was *Capparis spinosa*, with large handsome white flowers growing on the driest and hottest of sandy slopes.

We halted a day at Khalatze which, however, we did not find

very rich in bird life. Skylarks and Magpies were common, and we secured an old cock Chukor, weighing twenty ounces which belonged to the pale race *C. chukar pallescens*.

The Whistling Thrush (*Myiophoneus*) was also seen by the river and also a pair of Grey Tits (*Parus major kashmiriensis*).

June 16. Khalatze to Lamayuru. On this return march we secured a specimen of the Pied Chat (*Ænanthe picata*). We also shot a Martin (*Delichon urbica*).

In the evening we climbed up above the camp to about 12,000' and came on a family of fully-fledged young Desert Chats, on the wing. Wild Rhubarb was coming up on the hillside at the same altitude.

June 17. We halted a day at Lamayuru, climbed up to about 14,000' but saw very few birds. Found the nest of Adam's Finch ready for eggs in hole near base of mane wall. The birds came quite close to me as I examined a nest and did not seem to be a bit anxious.

According to plan, our next objective was the head of the Suru valley. To reach this from Lamayuru in ordinary years would be a simple matter—first two marches up the Kangi stream, and then over the Kangi Pass. This entails fording the Kangi stream about half a dozen times, which is not ordinarily difficult. This year however owing to the exceptionally heavy snowfall the Kangi stream was a formidable torrent and quite unfordable; so we had to seek out some other route.

We were told that we could get through from Lamayuru *via* Wanla and Zanskar but that the route would be longer, perhaps four marches and also more difficult. We decided to adopt this route, but we might have hesitated to do so had we known how long and difficult it was to be; for it took us ten days to do about ninety miles of very hard marching over bad tracks which were in places both difficult and dangerous.

June 18. Lamayuru to Wanla. Nine miles. First an ascent to a pass 12,000' and then gradually down to a valley and fair sized stream with cultivation and thorny scrub at Wanla 10,500'. Here we found Bluethroats again and also House Martins and a pair of Swallows (*H. rustica*). Also a few Crag Martins with unfinished nests in a cave above the river.

June 19. Wanla to Hanupatta. Ten miles. The path follows the stream and the valley soon becomes a gorge, almost a defile and the path is reduced almost to vanishing point. We crossed the stream three times by bridges and then had to ford it twice, the first time up to our middles in water nearly ice-cold. We took off our boots and nether garments and threw them across the stream before tackling it. W.'s boots tied together, with stockings inserted, made a forced landing in midstream and were instantly whirled away in the torrent! I had visions of W. toiling up the valley bare-footed; however a plucky Ladakhi retainer who plunged into the stream without hesitation and rescued the boots a little further down in a backwater eddy where their downward journey had fortunately been arrested.

The country we were passing through was very remarkable,

Huge vertical cliffs and precipices on either side running up fully a couple of thousand feet almost shut out the sunlight. How our laden ponies got safely through this march was a marvel. There were no casualties. We arrived at Hanupatta in a more open valley and camped at 12,300' by a solitary juniper tree nine feet in girth.

Not very many birds were seen but we secured a specimen of a Red-mantled Rose-Finch (*Propasser rhodochalmys grandis* ♂) and also Hume's Chat (*Ænanthe abboniger* ♀) as well as two Mountain-Finches.

June 20. Hanupatta to Patoksar. Ten miles. A gradual ascent, fording a stream at 14,500' (very cold!) and then on up to the Shirshir Pass, 16,600' where there was snow still lying. View over the hills from the pass very fine. On the ascent to-day we came across the same large Rose-Finch (*Carpodacus severtzovi*). Also *Prunella fulvescens* and *rubeculoides*, *Phylloscopus affinis*, pigeons of three kinds (*Columba livia neglecta*, *rupestris* and *leuconota*), a Raven, Choughs, Adam's Finch and Brandt's Finch (*Fringilauda brandti*). We also met with some Horned-Larks (*Otocorys longirostris*) which all appeared to be males.

Eventually we reached Patoksar and camped by a stream at 13,500'. This is the highest cultivation we have seen.

June 21. Patoksar to Ilchung. Twelve miles. A very cold, clear morning. Ice on shallow pools, and sponge frozen! Made an early start as usual and shortly got the sun which was most grateful. A little above our camp we came on three great Snow-Cock waddling along the path in front of us, like geese! Having no suitable weapon handy, they escaped. Further on heard many snow cock calling a musical loud whistle of about four notes, reminding one somewhat of the wild note of the Curlew.

On this march W. found the nest of Adam's Finch under a rock with four fresh eggs—pure white.

The path ascended gradually, culminating in the Singhe Pass 16,500' where there was much snow including a snow cornice on the ridge. Saw many Stoliczka's Mountain-Finch and Brandt's Mountain-Finch in this march and found a Redstart's nest with hard-set eggs under a rock, and a nest of the Horned Lark (*Otocorys longirostris*) with two fresh eggs under a tuft of grass. The full clutch of this species is three or two eggs only. Our camp at Ilchung was at 13,200'. Here we found House Martins again and Choughs of both kinds.

June 22. Ilchung to Linshet. Eleven miles. First a steady climb of three miles up to the Chupa La 14,600'—Snow-Cock calling all the way—then steeply down to a valley 13,100', followed by a second steep climb up to the Nirgūm La at 14,400', and lastly a gradual descent to a large village and monastery at Linshet which is 13,000'.

Birds seen in the march to-day were Snow-Cock (*Tetraogallus himalayensis*), Rose-Finch (*Carpodacus severtzovi*) and the Olivaceous Tree-Warbler (*P. indicus*). The latter has a song not unlike that of the Lesser Whitethroat but not often heard.

June 23. Linshet to Oma River. Nine miles. We struck camp and packed early, as usual but for some reason no transport arrived. We waited and waited. It was evident that the people were trying

to boycott us and did not want us to go on any further. Among other objections they stated that we should meet with an unfordable river. This we found was true, but as we did not have to cross the river it was no obstacle! However by dint of much pressure and persuasion we eventually collected a mixed lot including yaks, ponies, monks and even nuns who carried our kit on to the next camp by the Oma river at 12,500'.

The march was first uphill to the Barma La, 15,500', a very cold exposed and windy spot, then down over many snow bridges to the junction of our small stream with the big unfordable Oma river. Here we found Common Rose-Finches and Chiffchaffs again and plenty of welcome firewood (dwarf willow).

June 24. Oma river to Debring. Seven miles. The path to-day was the worst we had so far experienced. It follows the Oma river—at times along the edge of the stony bed, at others up along and over hanging precipices—involving many ups and downs of several hundreds of feet. Here, too, the path is reduced to a minimum, often only just room for one to put his foot, and it is no place for any one who has not a good head or who suffers from vertigo, as a fall would take one down several hundred feet into the riverbed with certain death. However we got through safely and what was much more wonderful was the fact that our kit loaded on eight yaks and twenty coolies also got through with no casualty. Yaks are really marvellous on bad rocky, steep slopes. On the march we secured a fine specimen of *Carpodacus severtzovi* which frequents rocky slopes.

Debring is a fair sized village at 13,100'—with a considerable amount of cultivation and a good many willow trees,—also ample water for irrigation from two streams. Here we found Choughs (both kinds), Short-toed Larks, Redstarts, House-Martins and Adam's Finch all common and on the dry slopes above, *Phylloscopus indicus*.

June 25. Debring to camp. Four miles. A short march up the valley to a camping ground below the Pass which we must cross to-morrow. Our camp was at 13,900' among rocks with much low scrub consisting of dwarf Lonicera, Ephedra, dwarf willows, etc. W. secured an Orange-barred Willow-Warbler (*Phylloscopus pulcher*) in the willow trees near our last camp, the only one seen throughout the tour. Near our camp below the Pass we saw several of the large Rose-Finches, and our shikari found a nest built under a stone, ready for eggs.

There were many Marmots about, the Himalayan—not the Tibetan species. We also found the nest of *Phylloscopus indicus* in a dwarf Lonicera bush with four fresh eggs, and secured a second specimen of the pale race of Chukor, which is characteristic of this dry, stony, sandy country.

June 26. Camp to camp above Gompa. Nine miles. Made a very early start. The march to-day started with a climb of 2,500'. Nearly all over snow and a good deal of it deep snow, often in conical peaks or ridges making going difficult. We reached the Pass, the Pig Dong La, altitude 16,600', at 8.30 and then started down. Our path led down a valley which gradually increased in dimensions.

At midday when we stopped for lunch it began to sleet and was very cold. We took shelter under some steep rocks and waited patiently for our kit to arrive which it eventually did and we got our camp pitched on a small plateau, everything very wet. Now, however, the sun came out brightly and every one soon revived.

Otocoris longirostris were common round our camp at 14,500'. Also a pair of Desert Chats, Redstarts, Mountain-Finches, Robin Accentors and the ubiquitous Eastern Meadow-Bunting. This latter was on the whole commonest and most widespread of all the birds we met with, the House-Sparrow only excepted.

June 27. Camp to Zuildo. Ten miles. A fine frosty morning. Saw a few Himalayan Rubythroats (*Calliope pectoralis*). We must now be near the meeting point of the two races, the Himalayan and the Tibetan (*C. p. tschebaiewi*) as the latter occurs in Southern Ladakh.

We saw and compared *Phylloscopus affinis* and *P. indicus* together. They are very similar in colour and appearance and their songs are also very similar but that of *affinis* is preceded by a single separate note which is not the case with *indicus*.

Saw a pair of *Carpodacus severtzovi*. Now we caught sight of the Gompa (monastery) and knew we were at the head of the Suru valley and approaching the great Rungdum Swamp which was our objective and which we had been keenly looking forward to as the home of the Eastern Redshank, the Lesser Mongolian Plover and the Eastern Common Tern (*Sterna hirundo tibetana*). Three miles down the open valley from the Gompa we arrived at a miserable collection of huts—the village of Zuildo, on the northern and eastern margin of the Rungdum Swamp and here we pitched our camp. It was a cold, bleak spot, very windy and with snow on the mountains on both sides of us right down to the valley. The altitude of Zuildo is 13,100'.

After ten days' very strenuous marching we arranged for a halt of five days, more especially because we were anxious to work the Rungdum Swamp thoroughly before moving down the Suru valley.

The Suru river at Zuildo is already a broad body of water and unfordable at this time of the year. The stream is not very rapid probably averaging about three miles per hour for the eight miles as it skirts the Rungdum Swamp.

The swamp occupies the whole valley which in this portion has widened out and is nearly a mile across. It is caused by a series of large springs which arise at the base of the mountain range which constitutes the northern flank of the valley. A fair proportion of the swamp consists of marshy grass land with tussocks of coarse grass, reeds and sedges, and innumerable little pools and channels of water, some fairly deep. Progress here is not easy but with care and circumspection combined with considerable activity it is possible to explore a good deal of it on foot. Another type, well represented, is covered with dwarf willow of which three or four species are common. Mosquitoes (*Culex sp.*) are very numerous, but owing to the unusual cold they were not nearly as bad as had been experienced by the writer on a previous visit.

Our camp at Zuildo was close to the river with the swamp on

one side of us and a large area of stony, sandy waste, a 'fan' resulting from a side stream, occupying the other.

We were surprised to see a party of eight Bar-headed Geese (*Anser indicus*) swimming about on the river close to our camp and throughout our stay they appeared from time to time and disported themselves sometimes in the water and sometimes in the land. They did not appear to be breeding, though at this time of the year they would have eggs or freshly-hatched young in Southern Ladakh near the Tsomoriri Lake or at Shushal. We also saw a few Goosanders on the river on one or two occasions and a flight of eight Pintail Ducks were also seen.

The Eastern Redshanks were fairly common in the swampy area. They were naturally shy but we soon found that they had in most cases either hard set eggs or freshly hatched young. As a result of much searching in the swamp and watching with glasses we found one nest with fresh eggs and several chicks. The eggs were laid in a tussock of grass in the swamp.

Several pairs of the Lesser Sand Plover (*Ægialitis mongolica*) occupied the stony 'fan' west of our camp and others on similar ground nearer Gompa. The birds are extremely difficult to follow as they run about at great speed on the sand and their eggs, three in number, are extraordinarily difficult to locate. One may pass them over and over again at close quarters without seeing them. We succeeded in finding three nests with eggs and several chicks, but one nest of eggs, an incomplete clutch, was washed away by a rise in the river and another lot were very hard set. One lot of three fresh eggs was however secured—which were pale *cafe-au-lait* rather densely speckled and spotted with dark brown. The eggs are laid in little saucer-shaped hollows in the sand scraped out by the bird generally at some considerable distance from the water.

A few of the terns we were in search of were seen from time to time generally fishing over the larger pools near the swamp. They were usually either single birds or in pairs. We could see no signs of breeding. Three specimens were secured. The bird turns out to be *Sterna hirundo tibetana*. Other birds seen in and around the Rungdum Swamp were:—

Skylarks (*Alauda arvensis guttata*), very common and breeding.

We found several nests in the drier portions of the swamp. Horned Larks (*Otocoris alpestris longirostris*) and Yellow-headed Wagtails (*Motacilla citreola calcaratus*) extremely common everywhere in the swamp. Many nests found with eggs usually very well concealed in grass or at base of dwarf willow.

The Robin Accentor (*Prunella rubeculoides*) was also very common and breeding on ground at base of dwarf willow or merely in hole in tussock. Eggs three; colour as in hedge-sparrows.

Tickell's Willow Warbler (*Phylloscopus affinis*). Fairly common and breeding in the low willow scrub in the swamp. Fresh eggs taken. The Chiffchaff (*Phylloscopus collybita sirdianus*). Fairly abundant, breeding in the dwarf willows in the swamp. The Himalayan Rubythroat was also occasionally seen near the edge of the swamp or on the hillsides above it. The Cuckoo (*Cuculus canorus*) was also heard calling nearly every day. Choughs—the

red-billed variety—were often seen near our camp. Pigeons, chiefly the Blue Hill-Pigeon (*C. rupestris*) and also the Snow Pigeon (*Columba leuconota*) were commonly seen. Lastly, House-Martins (*Delichon urbica urbica*) and Crag-Martins were observed on several occasions and were breeding on the cliffs.

July 3. Zuildo to Gulma Tongas. Eleven miles. Our march to-day was alongside the Rungdum Swamp for about six or seven miles and then through thickets of willow and open country. Our camp was near the site of the Gulma Tongas village, now deserted. It is a delightful open spot, elevation 12,200' with a tarn of about an acre in extent close to the camping ground. There were ten Bar-headed Geese on the river close by, and a few Green Sandpipers, very wild, on the margin of the tarn. Those were doubtless non-breeding birds. We found a Horned Lark's nest with two slightly-set eggs close to our tents. This was discovered in a curious way. All through the bustle of men and animals involved in the pitching of our tents the lark had sat tight and refused to leave her nest. Later on I had opened up my Botanical press and spread the paper out in front of my tent to dry. Even this did not disturb the bird. Suddenly a gust of wind took away several sheets of paper one of which blew away close over the nest. This was too much for the bird which flew off, disclosing the nest. The nest was in a depression in the ground surrounded by a rampart of stones, some of which weighed from half to one ounce each!

We also found the nest of a Lesser Sand-Plover on a stony, sandy flat containing two freshly-hatched chicks and one egg. The nest was discovered owing to the extraordinary antics of the mother bird which shuffled about on the ground looking more like an animated bunch of feathers than a bird. We sat down within a few feet of the nest and the parent bird came slowly up to within about six feet of us. She did this for some time and finally got tired of the performance and stood up. While engaged in her strange antics we took a photo—but unfortunately, it does not show the bird! The next morning she was covering the chicks a short way off and we removed the single egg which proved to be addled.

July 4. Gluma Tongas to Parkachik. Ten miles. Our march to-day was through a lot of interesting rocky country still following the Suru river. The river had become much more rapid in places, in fact a roaring torrent or cascade and the valleys was in places full of enormous boulders weighing many hundreds of tons which had come down from the steep and lofty mountains on either side.

The flowers were extraordinarily beautiful including the lovely little purple *Primula minutissima*, the large purple blue *Primula nivalis*, in masses by the streams, the yellow onion, *Allium semenovii* and the small *Allium stracheyi* in the swamp, two buttercups (*Ranunculus pulchellus* and *chærophylla*), the dwarf *Thalictrum alpinum*, the golden *Potentilla argyrophylla*, the pink *Dianthus angulatus*, the beautiful little *Androsace zabulensis*, *Anemone albana*, *Saxifraga sibirica*, the purple *Lancea tibetica*.

Also *Draba glacialis* in golden masses, the deep the blue Gentian, *Gentiana carinata* in swampy places, and on dry warm slopes *Arabis*

tibetica, the deep blue *Martensia echioides* and the pink Thyme (*Thymus serpyphyllum*).

Three species of Louse-wort, crimson, pink and yellow (*Pedicularis pyramidata*, *siphonantha* and *cornuta*) were common on damp ground. Also the Edelweis (*Leontopodium leontopodium*) and the lovely silvery *Anaphyllis xylorhiza* and *maritima*. *Campanula aristata* was also seen, though not common, and also *Chrysanthemum tibeticum* and *Aster tibeticus*. The curious gnetaceous, dwarf, shrub-like plant *Ephedra Gerardiana* with its golden flowers was also exceedingly common on dry rocky slopes and several species of sedge and rush were dispersed throughout the swamp. There was no tree growth at all, with the exception of dwarf-willows usually only three or four feet high or less, exceptionally about eight feet high.

As we approached Parkachik we came under the lower slopes of the giant Nun Kun whose three-fold summit exceeds 23,000'. This mountain was explored by Dr. E. Neve and subsequently two of its three peaks were climbed by Dr. and Mrs. Bullock Workman and Count Calciati. The highest peak of the three, the Dome, has not yet been attempted.

The Nun Kun mountain is an extraordinary fine mass and the view of it from Parkachik is most imposing. Several large glaciers descend from its slopes. One of these ends abruptly in the Suru river close to Parkachik where its tail is washed by the waters of the river. The great Barmal glacier which also takes its rise on this mountain after a course of no less than fifteen miles flows into the Wardwan Valley below the Bhotkhol Pass. A month or two in June, July and August might be profitably spent exploring the slopes, the peaks and glaciers of this mighty mountain mass, and I commend this adventure to any enterprising naturalist with a penchant for exploration.

On the march to Parkachik young Horned-Larks, well on the wing, were seen, also several Rubythroats, and a nest of this species in a hole on a grassy slope among shrubby growth, containing three half-fledged young. *Phylloscopus indicus* and *affinis* were again common and a nest of the latter with fresh eggs was found. Also a Chiffchaff's nest with four eggs. A single Lämmergeyer was seen.

July 5. A halt at Parkachik, a picturesque village perched up on the hillside at 11,000', five hundred feet above the river. The morning was spent down in the thorny scrub (*Hippophae rhamnoides*) of which there are large areas occupying many acres of the wide stony bed of the Suru river. The Ibis-bill (*Ibidorhynchus struthersi*) was seen on an island, where it had doubtless bred. Common Sandpipers were also seen here. This altitude (11,000') appears to be about the upper limit of the breeding of both these species. In the thorny scrub Bluethroats, Rubythroats and the Large-billed Bush-Warbler (*Tribura major*) were common. Chiffchaffs, Common Rose-Finches (*Carpodacus roseatus*) and the Gold-fronted Finch (*Metoponia pusilla*) were also numerous.

A nest of *Tribura* deep in a thorn and artfully concealed in grass was discovered. It contained four fresh eggs. These, and the nest,

resemble those of the European Grasshopper-Warbler, and indeed these species are evidently very nearly allied. The bird of this nest, when disturbed, ran away through the grass exactly like a mouse and never took flight. She was betrayed by the movement of the grass as she ran and had I not been specially on the look out for this bird with whose habits I was acquainted I should never have been aware of the nest.

A brood of young Rubythroats strong on the wing, was also seen, and a nest of the White-capped Redstart (*Chaimarrhornis leucocephalus*) was discovered, with four fresh eggs in a hole in a rocky cliff.

July 6. Parkachik to Suru Bridge. Five miles. The Suru river takes a great U shaped bend at this point fully twelve miles in circuit whereas by crossing over a pass at the narrow neck of the U above Parkachik the distance is reduced to about two or three miles only. The climb up to the pass is steep and rocky. The view from this point which is about 12,000' is very grand, as it commands the whole of the Nunkun massiff on the one side and the Himalaya trending in the direction of the Zoji La in the other.

On this march we were anxious to search for a little owl which our shikari Lala had reported the previous day, and so far we had found no owl inhabiting this dry, rocky, sandy country above the tree limit. Lala led us up to a very steep rocky ridge and sure enough there was a little owl looking at us from a ledge some way up. Before we could secure him he retreated into a crack in the rock and obstinately refused to show himself again. We scanned the rocks above and below and shortly W. spotted another similar owl a good deal higher up. I stalked this bird with the .410 keeping very carefully out of sight and directed by W. from below. It was exciting work as we did not know what this owl would be and were most anxious therefore to secure a specimen. At last a point was reached from which I judged I should see the bird within easy shot, and exposed my head, but no, it had moved on. Another short stalk and a shot was obtained and the bird disappeared over the edge of the rock on which it was sitting. When I fired it had a small bird in its claws. I hurried forward and looked over the precipice but saw no signs of the owl. I then climbed down to where, if hit, it should be lying, but at first could find nothing but the body of a Stewart's Bunting which it had held in its claws. Shortly, to my joy I spied the owl on the ground. It proved to be a fine specimen of a race of the Little Owl (*Athene noctua bactriana*), previously unrecorded from Ladakh, Baltistan or Kashmir. It appears to be a rare bird in Ladakh, and we only saw one other pair, also not far from Suru Bridge. On the way down beyond the pass a specimen of Brandt's Mountain-Finch (*Fringillauda brandti haematopygia*) was secured. These rather large finches of dull brownish colouration, except for a pinkish patch on the rump, are fairly common from 12,000' upwards, especially in moist places. They occur in pairs and small parties and doubtless breed under rocks and stones though I have never succeeded in finding a nest, in spite of much time and trouble spent in search.

Two days were spent at Suru Bridge, our camp being pitched near

the wooden bridge—a rather perilous affair—but the only available crossing for many miles up and down river. We found nothing new at Suru Bridge but found nests with eggs of Bluethroats, Large-billed Bush-Warblers, Robin Accentor, Yellow-headed Wagtail, Chiffchaffs, Tickell's Willow-Warbler, the Skylark, the Eastern Meadow-Bunting, the Horned-Lark, the Short-toed Lark and Gold-fronted Finch.

The last had just commenced to breed—a beautiful little nest lined with white willow cotton resembling that of a Lesser Redpole or Gold Finch, only not quite so neat, placed in a low briar with usually five eggs similar in colouration to those of the Linnet, only of course smaller.

July 9. Suru Bridge to Sanku. Thirteen miles. All our kit had to be carried over the bridge by our pony men as we did not wish to risk losing it. One pony belonging to another caravan fell over the bridge but without a load and was rescued down below.

Skylarks, Bluethroats, Gold-fronted Finches and Common Rose-Finches were common on the march. Pied Wagtails (*M. alba alboides*) were also seen and a hobby. A Lämmergeyer was also seen and a pair of Kestrels with a nest high up on a cliff. Carrion-Crows and Magpies are now common again, and willow trees and poplars are found everywhere. An Ibis-bill was seen by the river.

Sankhu is a large village occupying a fine, broad area of good cultivation opposite the tri-junction of the Kartse, and Uмба streams with the Suru river.

Here we found Large-billed Bush-Warblers, Bluethroats, Gold-fronted Finches, the Rose-Finch, Skylarks and Yellow-headed Wagtails all extremely common. The Rose-Finches are now first beginning to lay. The nest resembles that of a linnet and is built usually in a low thorny bush (*Hippophæ*). The eggs, four, very rarely five, in number are dark blue marked with brownish or black specks. Many swifts (*Cypselus apus peginensis*) were seen hawking flies, and two cuckoos, were still calling.

July 11. Sankhu to Tsalikot. Ten miles. Our road still follows the river and our camp was at 9,400'. Rose-Finches were common and several nests with eggs were found.

Gold-Finches also seen but no nests found. A lesser Whitethroat's nest (*Sylvia althca*) was seen with three young and a pair of *Phylloscopus indicus* feeding young. A fully-fledged young *Ænanthe pleschanka* was secured.

July 12. Tsaliskot to Maingni. Eight miles. Ne new birds seen except three Ravens and a pair of Grey Wagtails. The common grey Quail was calling 'Wet-my lips' round our camp but we could not discover its eggs.

July 13. Maingni to Kargil. Seven miles. We are now back in 'civilization' again—the first 'shops' we have seen for six weeks, and a big budget of letters. It was warm with bad sandflies at night. Ripe apricots were arriving from Skardu, a welcome change as we had seen no fresh fruit since we left Srinagar three months ago!

Two days were spent at Kargil repacking our kit and sorting out spare stores, etc., to be sent back direct to Srinagar.

Our next objective was the Deosai Plains to be reached *via* the Shingo-Shigar River, a difficult route.

Bluethroats' nests with eggs and with young, a *Tribura* nest with eggs, two lesser Whitethroats' nests and a Chiffchaff's nest were all we found at Kargil. Apricots were not yet ripe here.

July 16. Kargil to Karkitchu. Seven miles. Our road took us down the Suru river for about two miles then across the Skardu suspension bridge, over the Dras river and up its left bank as far as the village of Karkitchu where we camped in the welcome shade of apricot trees. A Bluethroat's nest, found the previous day with three fledged young, was taken and the young fed on insects, grasshoppers, earwigs and beetles, etc., on the march.

A young Blue Rock-Thrush (*Monticola cyanus*) was obtained.

July 17. Karkitchu to Chani-Kai. Ten miles. Visited the nest of a new species of Rose-Finch found the evening before in a low briar. The nest contained one young bird and three addled eggs; pale blue sparingly spotted black. The bird was identified satisfactorily as *Propasser rhodochlamys grandis*. The path was very rocky and difficult. While resting for lunch under an apricot tree a mouse-hare about as big as a guinea pig came out and munched green leaves quite close by.

Our march followed the Shingo-Shigar river which has a large volume of water beautifully clear and is a great contrast to the Indus, Dras, Suru and Oma rivers all of which were more or less muddy or turbid with glacier water.

July 18. Chani-Khai to Matiyal. Twelve miles. We made an extra early start as the heat of the previous day had been very trying in spite of the elevation (nearly 11,000'). Soon after the start we came on a number of House Martins hawking flies over the fields. We shot one for identification. It was *Delichon urbica urbica*. The path was the worst we had ever experienced. There was in fact practically no path, and we had to climb over broken stone and boulders, often of large size, which was very tiring work as one had to place one's feet carefully. How our loaded coolies managed it was really a marvel. This was the hottest march of the whole tour, and we had a perpetual thirst which, however, we could slake in the almost ice-cold streamlets which we crossed at frequent intervals.

We halted at midday in a delightful shady place by the river, a thicket of willows, juniper and *Myricaria elegans*, the latter a characteristic large shrub of many of the valleys of Ladakh with very lovely spikes of small pinkish white flowers. Wild roses with deep crimson flowers were also in evidence.

We were told it was two miles on to Matiyal; so we decided to push on though we were rather done. It proved to be fully five miles with a steep climb of 800 feet at the finish!

We passed the junction of the Shingo with the Shigar river on this march. The former drains the Chota Deosai Valley. We follow the latter, which is now of a beautiful clear dark green, and in places a roaring torrent. Matiyal village consists of only a few huts. It is situated on a large cultivated plateau well above the river with a scattered forest of juniper and *Pinus excelsa* not far off. The presence of forest trees indicates a moister climate.

We halted a day at Matiyal to arrange ponies to replace our coolie transport. We explored the forest area and saw, among others, the Simla Black-Tit (*Lophophanes melanolophus*) only seen in this valley since crossing the Zoji La. Also *Phylloscopus humii* and *indicus*, *Propasser rhodochlamys grandis*, *Carpodacus roseatus*, *Metoponia*, *Emberiza cia stracheyi*, *Phyrocorax phyrocorax* and *Columba leuconota*. Also, near our camp, skylarks and short-toed larks.

Two species of juniper were common, one an erect tree and the other a squat spreading shrub. A species of *Rubus* was also observed. Biting flies were very troublesome, a species of *Tabanus* as well as a *Simulium*.

July 20. Matiyal to Karbos. Nine miles. A river had to be forded by our ponies shortly after leaving Matiyal, after which the path was much up and down and often over very bad rocky ground over which one would not think of leading an ordinary pony without a load, but the wonderful little local ponies carried our loads right through without a casualty.

On the march we saw Bluethroats (white spot), a large Rose-Finch (? *Propasser grandis*), Gold-Finches and Black-Tits (*Lophophanes rufonuchalis*) again. Many beautiful flowers including pure white King-cups yellow Louse-wort—some two feet high, and masses of purple Cranes-bill. Butterflies were also fairly numerous, Blues and Coppers and a Fritillary new to us.

Biting flies and mosquitoes were again very bad.

July 21. Kartos to camp by river. Eight miles. A muggy damp morning. Mosquitoes very bad. The path was better than the previous day but still bad in parts.

On the march we saw traces of Red Bear and came across *Acanthopneuste viridanus* for the first time and secured a specimen. They frequent the willow patches on the hillside. We also heard *Phylloscopus indicus*, *humii* and *collybitus*. Other birds seen were Swifts, Redstarts, Sky-larks, White-capped Redstarts, Common Rose-Finch, Tree-Pipits, Blue-headed Robins and Rubythroat. May flies were very numerous at our camp.

July 22. Camp to camp Domel. Ten miles. We are now nearing the 'Promised Land'—the Deosai Plain, which we have been eagerly looking forward to! The whole of this march was through millions of May-fly (*Ephemera*) sometimes in dense clouds in the air, and also seated upon the vegetation, chiefly on Dock leaves. There were many swifts about feeding no doubt on the May-flies. The May-flies were a godsend to my young Bluethroats who consumed them in large quantities.

Our path gradually became easier as we approached the Deosai. Finally we were confronted with a broad swiftly flowing river which had to be forded before we could reach our camp. It looked a tough proposition, the more so since the water was nearly ice-cold. However we decided to tackle it, and W. and I stripped of all clothing, set out armed with a stout stick each. We managed with much difficulty to get nearly to midstream but the current was very strong, and we were constantly losing our feet and in this cold water there was some danger of being completely

carried away. We struggled back with difficulty and held a council of war. We decided to try again with the help of the ponies. I mounted one and W. seized its tail. A pony man held on to the bridle. In this way we managed to get safely across but it was touch and go.

Our kit was rearranged on the ponies with such articles as it was essential should not get wet loaded on the top, and the ponies and men then came across in a mass the men hanging on to the ponies. All got safely over. We were feeling very cold and lay down in the sun on the hot stones with our clothes spread out to dry. This soon gave us fresh life, and we pushed on two miles to our camp on the Deosai.

Birds on to-day's march were a strange, large eagle, two Pallas's Fishing-Eagles, Rubythroats, Redstarts, Horned-Larks, Skylarks, Tree-Pipits, Common Rose-Finch, Mountain-Finch, Swifts, Yellow-headed Wagtails and Chiffchaffs. Also a cuckoo being mobbed by a Rubythroat.

July 23. Halt—Domel.

We had been eagerly looking forward to the Deosai plains, this strange extensive uninhabited plateau of moorland and swamp some 300 square miles in area, drained by numerous big streams, full of fish, surrounded by lofty snow clad mountains and subject to icy blizzards in almost every month of the year.

The wild beauty of the moorland with its lush green grass and carpets of alpine flowers alternating with drier stony or sandy areas and its clear, cold streams with dwarf-willow beds is undeniable, but it was absolutely spoilt at the time of our visit by the almost indescribable plague of mosquitoes. These bloodthirsty pests were present in millions and the swiftness and pertinacity of their attacks was quite extraordinary. I had had many years' experience of mosquitoes in the tropics, including Burma, but they were as nothing compared to these voracious tigers of the Deosai Plains. Their attacks commenced about half an hour after sunrise and went on to about an hour after sunset. They were at their worst in the morning and evening hours. The species was a *Culex* of rather large dimensions. Fortunately we had been warned and had provided ourselves with head nets, but working in head nets is a nuisance at best. We had not been an hour on the Deosai when we were as anxious to leave it as we had been to reach it.

Red Bears are said to be numerous on the Deosai and to catch fish from the streams with their claws. We did not actually see any but we saw their traces. Marmots were very numerous in places. Birds were not very numerous either in individuals or in species. The chief birds seen were Horned Larks (*O. longirostris*), Pipits (*A. roseatus* and *trivialis*), Rubythroats, Robin Accentors and Yellow-headed Wagtails. Also a few cuckoos. On the dry, stony plain a few of the Lesser Sand-Plover were seen. We collected several Horned-Larks which appear to be identical with the *Otocoris alpestris longirostris* found at Dras and elsewhere on our tour.

July 24. Domel to Chandarkot. Nine miles. Our march lay over the moor. Mosquitoes were terribly bad till about midday when a cold wind got up and banished them. We saw a grey Heron,

a Peregrine and a Golden Eagle to-day. The latter probably feeds on marmots in this part of the country.

Our camp was in a delightful spot near the meeting of two streams with swampy ground rich in flowers, near by. Here I found among other things the beautiful little *Primula rosea* previously unrecorded from Baltistan.

July 25. Chandarkot to Chota Deosai. Eleven miles. Our path followed the Kalapani stream up to its source near the San Sangri La (Pass) altitude 14,200'. At the pass there are two beautiful tarns, half a mile or so across. There was much snow at the pass and on the neighbouring mountains. From the pass we had a steep descent to the valley of the Chota Deosai where we camped by a large stream, the head waters of the Shingo river. We saw a pair of ravens standing by the body of a dead pony by the way. No new birds were seen. Fortunately a cold wind was blowing near our camp so that we were not much troubled by mosquitoes. A most unfortunate incident was the loss of W's field glasses, which he left lying not far off where we rested for lunch and which were almost certainly stolen by a Gujar who passed by, the only man who had passed us for days.

July 26. Chota Deosai to Minimarg. Fifteen miles. The night at Chota Deosai was marked by a hard frost. Our tents were white with rime and our sponges and water in basins frozen. A gradual ascent of one and a half miles brought us to the Panzil La at 13,000', from which point a gradual descent to Minimarg at 9,333' near the head waters of the Kishanganga river. We passed the Burzil Resthouse on the Gilgit road a few miles before reaching Minimarg. Here we obtained specimens of *Acanthopneuste viridanus* and the Tree-Pipit (*Anthus trivialis harringtoni*).

Since we crossed the Panzil Pass there has been a marked change in the climate and vegetation, hillsides being clothed with forest of birch and lower down with silver fir and blue pine and shrubs of various kinds. Minimarg is a small village with a post office.

We were disappointed to find that mosquitoes were fairly bad at Minimarg. We had hoped to have left them behind at the pass!

We halted a day at Minimarg.

July 27. Explored the Nagai valley. We found Hodgson's Shortwing (*Hodgsonius phœnicuroides*) common in the open parts of the fir forest and secured specimens of both old and young birds. Also a young Buzzard (*Buteo buteo*).

July 28. Minimarg to Dudgai. Fourteen miles. Our march led down the Gilgit road on the sunny side of the valley, the opposite side being clothed with forest of silver fir and blue pine.

We heard *Hodgsonius* calling, a rather melancholy refrain of three notes, the middle one lowest. Also *Acanthopneuste magnirostris*, its call, tee—tee—tee—tee—tee, a descending cadence of loud and shrill notes could be heard above the noisy turmoil of the torrent.

We were delighted to find no mosquitoes at our camp at Dudgai, 8,350' altitude.

July 29. Dudgai to Barman. Ten miles. A pretty march down the Burzil river. At Gurais the valley opens out and there is much cultivation and several large villages. We camped near a big poplar